Recombinant TSSK4 protein (His tag)

Catalog Number	545231
Synonyms	TSK-4; TSSK-4; Testis-specific kinase 4; Serine/threonine-protein kinase 22E
Species	Human
Expression System	E. coli
Accession	Q6SA08
Molecular Weight	Predictes a molecular mass of 39.11 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	1-328
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-328 aa (Q6SA08) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Testis-specific serine/threonine-protein kinase 4 (TSK-4/TSSK-4), encompassing the full-length protein kinase domain (residues 1-328). This high-purity fragment is an essential tool for investigating kinase activity, phosphorylation mechanisms, and male germ cell development in research applications. Testis-specific serine/threonine-protein kinase 4 (TSSK4) is a key enzyme involved in male germ cell development and mature sperm function. It phosphorylates critical targets including CREB1 at Ser-133, activating the Cre/Creb signaling pathway, and also phosphorylates CREM and ODF2, indicating roles in transcriptional regulation and sperm structural integrity. The protein localizes to the acrosome in secretory vesicles and the flagellum in spermatozoa, highlighting its importance in sperm head and tail function. This recombinant fragment retains the complete kinase domain, enabling focused study of its enzymatic and signaling roles.